Office Action Summary	Application No.	Applicant(s)	
	09/616,232	MERK ET AL.	
	Examiner	Art Unit	
	Tony Mahmoudi	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

DOV POPOVICI
SUPERVISORY PATENT EXAMINER
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Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Remarks

1. In response to communications filed on 05-February-2003, the abstract of the disclosure and claims 2-6, 8-9, 11-12, 18-19, 21-22, 27-28, 35-36, and 38 are amended by the applicants. Claims 1-38 are pending in the application.

2. As requested by the applicants, the filing data of this application is verified as 14-July-2000.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-12, 17-24, 27-28, and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al (U.S. Patent No. 6,438,559) in view of Kumar et al (U.S. Patent No. 6,343,287.)

As to claim 1, White et al teaches method of producing a compact representation of a data package (see Abstract), the data package comprising at least one of meta-data and associated data elements and meta-data and associated data packages, where the meta-data

comprises at least one of name and type identifications for the data element and name and type identifications for the data package (see column 6, lines 50-67), comprising the steps of:

b) searching of the meta-data for defined, non application-dependent name and type identifications (see column 7, lines 4-10); and

c) representing the identifications found in step b) by defined substitutes which require little storage space (see column 4, lines 17-42.)

White et al does not teach: a) arranging of the data packages in a sequence.

Kumar et al teaches external data storage link for a profile service (see Abstract), in which he teaches arranging of the data packages in a sequence (see column 14, line 58 through column 15, line 4, and see column 21, lines 55-67.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al to include arranging of the data packages in a sequence.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al, by the teaching of Kumar et al, because arranging of the data packages in a sequence would enable the system to store the data in related sequences for easier access and for being able to define relationships between the data elements within a database.

As to claim 2, White et al teaches method of producing a compact representation of a structure of meta-data and data elements (see Abstract), with the correlation of meta-data with data, comprising data elements or a sub-structure of a structure being performed by a

program (see column 5, lines 50-58, where "correlation of data" is read on "relational database") and with the meta-data comprising at least name and type identifications for the data (see column 6, lines 64-67), comprising the steps of:

a) combining of meta-data and associated data to form a plurality of data packages (see column 6, lines 19-29);

c) searching the meta-data for defined, non- application-dependent identifications (see column 7, lines 4-10); and

d) representing the identifications found in step c) by defined substitutes which require little storage space (see column 4, lines 17-42.)

White et al does not teach: b) arranging of the data packages in a sequence.

Kumar et al teaches external data storage link for a profile service (see Abstract), in which he teaches arranging of the data packages in a sequence (see column 14, line 58 through column 15, line 4, and see column 21, lines 55-67.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al to include arranging of the data packages in a sequence.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al, by the teaching of Kumar et al, because arranging of the data packages in a sequence would enable the system to store the data in related sequences for easier access and for being able to define relationships between the data elements within a database.

As to claim 3, White et al as modified teaches the method further comprising the step of: storing the result of steps a-c on a storage medium (see White et al, column 13, lines 49-58.)

As to claim 4, White et al as modified teaches the method further comprising the step of: storing the result of steps a-d on a storage medium (see White et al, column 13, lines 49-58.)

As to claim 5, White et al as modified teaches the method further comprising the step of: transmitting the result of steps a-c to a data processing device (see White et al, column 6, lines 24-29.)

As to claim 6, White et al as modified teaches the method further comprising the step of: transmitting the result of steps a-d to a data processing device (see White et al, column 6, lines 24-29.)

As to claim 7, White et al as modified teaches wherein the meta-data is not transmitted at the same time but the correlation is performed by a program at the time of restoration (see White et al, column 8, line 43 through column 9, line 18.)

As to claim 8, White et al as modified teaches the method characterized in that the data package is an object which contains at least the following data elements with the following non-application-dependent identifications:

object name, object type and object attributes (see White et al, column 11, line 22 through column 12, line 31.)

As to claim 9, White et al as modified teaches the method characterized in that the data package is an object which contains the following data elements with the following non-application-dependent identifications:

object name, object type, object version and object attributes (see White et al, column 3, lines 50-56, and see column 11, line 22 through column 12, line 31.)

As to claims 10 and 11, White et al as modified teaches wherein the data package is a Java object (see White et al, column 4, lines 7-16.)

As to claim 12, White et al as modified does not teach wherein the data package is in XML (extendable markup language).

Kumar et al further teaches wherein the data package is in XML (see column 11, lines 39-48.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al as modified to include wherein the data package is in XML (extendable Markup Language.)

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al as modified, by the further teaching of Kumar et al, because, as explained by Kumar et al, "XML documents are a useful format, because the language is well understood, actively developed, and readily transportable through a variety of communications media using commonly available HTP transport mechanisms (see Kumar et al, column 11, lines 48-51.)

As to claims 17 and 18, White et al as modified teaches wherein the data package is a data structure which contains data elements with the following non-application-dependent identifications:

name, type, version and attributes of the data element (see White et al, column 3, lines 50-56, and see column 11, line 22 through column 12, line 31.)

As to claim 19, White et al as modified teaches wherein steps a-c are performed by a program, with a table to correlate non-application-dependent identifications with their associated substitutes being contained in the program (see White et al, column 4, lines 36-46, and see column 8, lines 1-10.)

As to claim 20, White et al as modified teaches wherein steps a-d are performed by a program, with a table to correlate non-application-dependent identifications with their associated substitutes being contained in the program (see White et al, column 4, lines 36-46, and see column 8, lines 1-10.)

As to claims 21 and 22, White et al as modified teaches the method comprising tile following further steps:

aa) searching of the metes-data for defined, application-dependent identifications (see White et al, column 7, lines 4-10);

bb) representation of the application-dependent identifications found in step aa) by defined substitutes which require little storage space (see White et al, column 4, lines 17-42);

cc) storage of the result of steps aa)-bb) on a storage medium (see White et al, column 13, lines 49-58) or transmission of the result of steps aa) -bb) to a data-processing device (see White et al, column 6, lines 24-29.)

As to claims 23 and 24, White et al as modified teaches wherein for each application a dedicated table containing defined application-dependent identifications and associated substitutes is loaded (see White et al, column 6, lines 64-67.)

As to claim 27, White et al as modified teaches the method characterized in that the substitute occupies a maximum of 2 bytes of storage space (see white et al, column 12, lines 33-44.)

As to claim 28, White et al as modified teaches the method characterized in that the substitute is make up of class, constructed flag and ID (see White et al, column 4, lines 22-26, and see column 12, lines 1-39.)

As to claims 37 and 38, White et al teaches computer software product which can be stored in the internal store of a digital computer, containing items of software code to carry out a method (see column 5, lines 6-12.)

As to the remainder of claim 37, see claim 1.

As to the remainder of claim 38, see claim 2.

5. Claims 13-16, 25-26, and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al (U.S. Patent No. 6,438,559) in view of Kumar et al (U.S. Patent No. 6,343,287), as applied to claims 1-12, 17-24, 27-28 and 37-38 above, and further in view of Hohle et al (U.S. Patent No. 6,101,477.)

As to claims 13-16, White et al as modified teaches wherein the non-application-dependent identifications object name, object type, object version and object attributes are represented (see White et al, column 3, lines 50-56, and see column 11, line 22 through column 12, line 31.)

White et al as modified still does not teach wherein identifications are represented by defined substitutes in a TLV coding laid down by ISO 8825 Basic Encoding Rules.

Hohle et al teaches a travel-related multi-function smart card method and apparatus (see Abstract), in which he teaches the identifications are represented by defined substitutes in a TLV coding laid down by ISO 8825 Basic Encoding Rules (see column 7, lines 39-43.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al as modified to include the

identifications represented by defined substitutes in a TLV coding laid down by ISO 8825 Basic Encoding Rules.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al as modified, by the teaching of Hohle et al, because, as explained by Hohle et al, "in a TLV object, information regarding the type and length of the information is included along with the actual data. Thus, a TLV object comprises a tag which identifies the type of data (as called out by the appropriate specification), a length field which indicates the length in bytes of the data to follow, and a value field, which comprises the primary data" (see Hohle et al, column 7, lines 43-49.)

As to claim 25 and 26, White et al as modified teaches wherein the makeup, definition and length of the substitutes are laid down by standard ISO/IEC 7816 or 8825 (see Hohle et al, column 3, lines 5-7, where "makeup, definition, an length" is read on "placement and size", and see column 4, lines 44-54.)

As to claims 33 and 34, White et al as modified teaches on-chip cache comprising at least one nonvolatile store for storing the compact representation (see White et el, column 5, lines 20-30.)

White et al as modified still does not teach chip card for storing the compact representation.

Hohle et al further teaches chip card for storing the compact representation (see Abstract, and see figure 1.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al as modified to include chip card for storing the compact representation.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al as modified, by the further teaching of Hohle et at, because chip card for storing the compact representation, would enable the system to securely and conveniently integrate various important applications (e.g. user personal data, financial data, etc.), and allow the chip card user to conduct various types of electronic transactions using the convenient and secure, wallet-size card when traveling and away from home.

As to claims 35 and 36, White et al as modified teaches apparatus comprising at least:

a) a data-processing device (see White et al, column 5, lines 12-18);

b) communications means (see White et al, column 6, lines 42-49);

c) a chip card, with data being exchangeable between the data-processing device and the chip card via the communications means, characterized in that a program to control a method can be installed on the data-processing device and the result of the method is stored on the chip card (see Hohle et al, Abstract, see figure 1.)

6. Claims 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al (U.S. Patent No. 6,438,559) in view of Kumar et al (U.S. Patent No. 6,343,287), as applied to

claims 1-12, 17-24, 27-28, and 37-38 above, and further in view of Shaw et al (U.S. Patent No. 6,362,836.)

As to claims 29 and 30, White et al as modified teaches the method comprising the following further step:

bbb) storage of the result of step aaa) on a storage medium (see White et al, column 13, lines 49-58) or transmission of the result of step aaa) to an data-processing device (see White et al, column 6, lines 24-29.)

White et al, as modified still does not teach: aaa) application of a current compression algorithm to the result of steps aa)-bb.)

Shaw et al teaches a three tier client-server architecture (see Abstract), in which he teaches application of a current compression algorithm to the result (see column 15, lines 4-17, and see column 16, lines 54-57.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al as modified to include application of a current compression algorithm to the result.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified White et al as modified, by the teaching of Shaw et al, because application of a current compression algorithm to the result, would optimize (increase) the network performance, especially for low bandwidth networks, such as a slow WAN or a modem connection.

As to claims 31 and 32, White et al as modified teaches wherein the compression algorithm is the ZLIB compression algorithm (see Shaw et al, column 21, lines 14-16.)

Response to Arguments

7. Applicant's arguments filed on 05-February-2003 with respect to the cited references have been fully considered but they are not found to be persuasive:

In response to the applicants' argument that "the cited passage teaches that White et al locates application-dependent information which does not comprise name and type identifications for data elements or data packages, as is expressly recited in the pending claims", the arguments have been fully considered but are not found to be persuasive, because White et al specifically teaches "column name" and "data type" which identify the data and upon which, the server returns format information to a client. Also, White et al specifically teaches that "In a database, Java classes are treated as data types, and a column can be declared with a Java class as its data type" (see column 8, lines 8-10.)

In response to the applicants' arguments that "representing the class of an object is neither the same as nor suggestive of representing the data package itself, wherein the data package comprises both meta-data and data", the arguments have been fully considered but are not found to be persuasive, because White et al teaches storing and retrieving Java objects as "column data", using JDBC classes (see column 8, lines 13-32, and see column 12, lines 56-67.)

In response to the applicants' argument that "the Kumar et al teaching with regard to arranging data packages in sequence would not logically be combined with the White et al patent teachings; and, even if combined, the combination would not obviate the invention as claims", the argument has been fully considered but is not found to be persuasive, because the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both cited references teach inventions that are in the same field of endeavor. The primary reference, White et al teaches producing compact representation of data packages, searching of meta-data, and defining substitutes requiring less storage space, as described in claim 1 above. The secondary reference, Kumar et al teaches arranging data packages in sequence, in external data sources. Therefore, the combined teachings would obviate the teachings of claim 1.

In response to the applicants' arguments that "neither the Hohle et al nor the Shaw et al patent teaches or suggests the data packages with meta-data and treatment thereof as is claimed by the present invention", the arguments have been fully considered but are not found to be persuasive, because the Hohle et al and Shaw et al patents were introduced by the examiner as third references, each teaching specific functions as claimed by the present

application, in further view of the combined primary and secondary cited references, White et al and Kumar et al. The Hohle et al patent teaches TLV coding laid down by ISO 8825, and the Shaw patent teaches compression algorithms, both within the same field of endeavor. Data packages with meta-data is taught by the combination of White et al and Kumar et al patents. Applicants are kindly directed to the discussions and remarks made in the above claims with regards to the mentioned references.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

tm

April 9, 2003

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